

DETAILED ACTION

Claim Objections

1. **Claim 5** is objected to because of the following informalities: In particular, "the method of on of claim 4..." should be "the method of claim 4..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C 102(e) as being anticipated by Thorpe et al US 6,999,563 B1 ("Thorpe").

As to **Claim 1**, Thorpe discloses a method of matching an utterance comprising a word to a record in a database using an automated speech recognition system (automation, caller, responses, match, col. 4, ln 44- col. 5, ln 5; recognition, Abstract) comprising

(a) using the automated speech recognition system to compare said utterance to a first grammar (comparison, match, speech, col. 4, ln 44- col. 5, ln 5), said first grammar forming including a word list of a selection of words from said

records in said database (predefined grammar, words, frequently requested listings, col. 4, In 44- col. 5, In 5; database, Abstract);

(b) determining best possible matches of the word in said utterance to **said first** grammar (matching, multiple listings, col. 5, In 45-55);

(c) after determining said best possible matches, creating a **second** grammar including a subset of said records in said database that contain at least one of said best possible matches (grammar for listings, synonymous listings, locality grammar, col. 3, In 1-14, locality grammar as second grammar, synonymous listings as best possible matches); and

(d) using the automated speech recognition system to match said utterance to a record within said **second grammar** (requested localities, matches, synonymous localities, col. 3, In 1-14, requested localities as user's request based on utterance, synonymous localities as record within locality grammar).

As to **Claim 2**, Thorpe discloses the method of claim 1 wherein said database is a directory (directory assistance databases, Abstract).

As to **Claim 3**, Thorpe discloses the method of claim 2 wherein said record is a listing (record, listing, col. 2, In 53-67; claim 1).

As to **Claim 4**, Thorpe discloses the method of claim 3 wherein the word list includes transformations of said selection of words (U_P_S, United Parcel Service, col. 6, In 42-67).

As to **Claim 5**, Thorpe discloses the method of on of claim 4 wherein the utterance is obtained by asking questions of a user (request for the desired listing and locality...,

caller col. 4, ln 47-51)

As to **Claim 6**, Thorpe discloses a system for matching an utterance comprising a word to a record in a database using an automatic speech recognition system (automation, caller, responses, match, col. 4, ln 44- col. 5, ln 5; recognition, Abstract) comprising:

(a) means for **using said automated speech recognition system to compare said utterance to a first grammar including** forming a word list **of** a selection of words from said records in said database (comparison, match, col. 4, ln 44- col. 5, ln 5; predefined grammar, words, frequently requested listings, col. 4, ln 44- col. 5, ln 5; database, Abstract);

(b) means for **determining best possible matches of the word in said utterance to said first grammar** (matching, multiple listings, col. 5, ln 45-55);

(c) means for creating a **second grammar** after determining said best possible matches, of a subset of said records in said database that contain at least one of said best possible matches (grammar for listings, synonymous listings, locality grammar, col. 3, ln 1-14, locality grammar as second grammar, synonymous listings as best possible matches); and

(d) means for using the automated speech recognition system to match said utterance to a record within said **second grammar** (requested localities, matches, synonymous localities, col. 3, ln 1-14, requested localities as user's request based on utterance, synonymous localities as record within locality grammar).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Thorpe.

As to **Claim 7**, Thorpe discloses a method of providing a listing to a user (Abstract) comprising:

- (a) establishing **voice** communications with the user (caller, inquiry, speech responses, Abstract);
- (b) asking a **sequence** plurality of questions of said user (request for the desired listing and locality..., caller col. 4, ln 47-51; col. 8, ln 12), and obtaining and recording answers **therefore using an automated system** (records, response, caller, col. 4, ln 47-51), **and not passing said user to an operator during said sequence of questions** (automation, Abstract; without operator intervention, claim 1);
- (c) by using said answers, determining a listing using an automated speech recognition system (Abstract; response, match grammar, listings, col. 4, ln 42-67);

Thorpe does not explicitly disclose establishing a confidence level for said listing. However,

since Thorpe discloses a pass situation when a listings match is found and a '1' is indicated, and a fail situation when no listings match is found and a '0' is indicated

(single number, announced to a caller, no numbers, transfer to an operator, col. 11, ln 18-30; col. 5, ln 17-21; fig 8), this suggests establishing a confidence level for the listings between '0' and '1');

(e) providing said listing, said **sequence** of questions, and said recorded answers to an operator if said confidence level is below a predetermined threshold (search results, recorded listing, locality responses, fails, forwarded to the next available operator....., col. 5, ln 17-29, search results as listings, **since** Thorpe discloses providing the recorded answers to the operator, this implies the operator had access to the sequence of questions that generated the answers); and

(f) if said confidence level is above a predetermined threshold, providing said listing to said user (single listing, announcement, col. 5, ln 48-51, announcement as a way of providing listing to the user).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to establishing a confidence level for the returned listings in the form of confidence in match/mismatch of the returned listings, so as to determine when to transfer the caller to an operator (Col. 11, ln 18-30)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUJIMI A. ADESANYA whose telephone number is 571-270-3307. The examiner can normally be reached on Monday-Friday 7.30a.m - 5.00p.m.

Art Unit: 2626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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